

Mattingly Products Company, Inc.)	Departmental
Somerset County)	Findings of Fact and Order
North Anson, Maine)	Air Emission License
A-123-71-G-R)	

After review of the air emissions license renewal application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

Mattingly Products Company, (MPC) located in Anson, Maine, has applied to renew their Air Emission License, permitting the operation of emission sources associated with their asphalt batch plant, concrete batch plant and crushed stone operations.

B. Emission Equipment

Asphalt Plant:

<u>Equipment</u>	<u>Process Rate (tons/hour)</u>	<u>Design Capacity Firing Rate</u>	<u>Control Devices</u>	<u>Date of Manufacture</u>
Kiln	100	16.4 MMBtu/hr, 120 gal/hr, 0.5% sulfur #2 fuel or diesel fuel	Baghouse	1962

Concrete Plant

<u>Equipment</u>	<u>Production Rate (cubic yards/hour)</u>	<u>Control Devices</u>
Concrete Batch Plant	50	Baghouse

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Rock Crushers:

<u>Designation</u>	<u>Process Rate (tons/hour)</u>	<u>Control Device</u>	<u>Date of Manufacture</u>
Primary	60	Spray Nozzles	1940
Secondary	60	Spray Nozzles	1968

Diesel Units:

<u>Source ID</u>	<u>Max. Capacity</u>	<u>Max. Firing Rate</u>	<u>Power Output</u>
Diesel Generator #1	0.5 MMBtu/hr	3.7 gal/hr	60 kW
Diesel Drive #2	1.0 MMBtu/hr	7.3 gal/hr	115 kW
Diesel Generator #3	2.5 MMBtu/hr	18 gal/hr	230 kW
Diesel Generator #4	1.37 MMBtu/hr	10.0 gal/hr	140 kW

C. Application Classification

The application for MPC does not include the licensing of increased emissions or the installation of new or modified equipment, therefore the license is considered to be a renewal of current licensed emission units only.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent best practical treatment (BPT), as defined in Chapter 100 of the Air Regulations. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. Asphalt Plant

The kiln was manufactured in 1962 and is therefore not subject to EPA New Source Performance Standards (NSPS) Subpart I for Hot Mix Asphalt Facilities manufactured after June 11, 1973.

Emissions from the asphalt operation and kiln shall vent to a baghouse to meet the requirements of BPT. The kiln fires #2 fuel or diesel fuel, both with a sulfur content not to exceed 0.5%. Regulated pollutants emitted from the rotary kiln are particulate matter (PM), particulate matter with a diameter smaller than ten microns (PM₁₀), sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO), and volatile organic compounds (VOC).

A summary of the BPT analysis for each of the pollutants is discussed below:

1. Chapter 106 regulates fuel sulfur content, however the use of 0.5% sulfur by weight fuel is more stringent and shall be used. SO₂ emission rates are based on all of the sulfur present in the fuel being converted to SO₂.
2. PM emission limits from asphalt plants are regulated by MEDEP Chapter 105. However, 0.03 gr/dscf (5.7 lb/hr) is more stringent and shall be used.
3. NO_x, CO and VOC emission limits are based upon AP-42 data dated 1/95 for hot mix asphalt plants.
4. Opacity from the asphalt plant baghouse is limited to no greater than 20% on a six (6) minute block average, except for no more than 2, six minute block averages in a 3 hour period.

The performance of the baghouse shall be constantly monitored by either one of the following at all times the rotary kiln is operating:

1. PM detector – when the detector signals excessive PM concentrations in the exhaust stream, MPC shall take corrective action within 24 hours, or immediately if opacity exceeds 20%.
2. Personnel with a current EPA Method 9 visible emissions certification – when the opacity exceeds 20%, the hot mix asphalt plant is operating with insufficient control and corrective action shall be taken immediately.

Fugitive particulate emissions from the asphalt plant shall be controlled so as to prevent visible emissions in excess of 10% opacity on a 6 minute block average basis.

C. Concrete Batch Plant

A summary of the BPT analysis for particulate matter is discussed below:

PM emissions for the three cement batching operation baghouses shall each be limited to 5% opacity on a six (6) minute block average basis. Fugitive PM emissions from the concrete batching operation shall be controlled so as to prevent visible emissions in excess of 20% opacity on a six (6) minute block average basis.

D. Rock Crushers

The primary and secondary rock crushers are portable units manufactured in 1940 and 1968, respectively, with rated capacities of 60 tons/hour each. The rock crushers are not subject to NSPS Subpart OOO for Nonmetallic Mineral Processing Plants manufactured after August 31, 1983, with capacities greater than 150 tons/hr for portable plants and greater than 25 tons/hr for non-portable plants.

The regulated pollutant from the rock crushers is particulate emissions. To meet the requirements of BPT for control of PM emissions from the rock crushers, MPC shall control visible emissions to no greater than 10% opacity on a six minute block average.

MPC shall continue to maintain and operate water sprays for particulate control on all rock crushers.

E. Diesel Units

A summary of the BPT analysis for each of the pollutants is discussed below:

1. Chapter 106 regulates fuel sulfur content, however the use of 0.5% sulfur by weight fuel is more stringent and shall be used.
2. PM, PM₁₀, NO_x, CO and VOC emission limits are based upon AP-42 data dated 10/96 for diesel engines less than 600 horsepower.

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3. Opacity from Diesel Generator #1, Diesel Drive #2, Diesel Generator #3 and Diesel Generator #4 shall not exceed 30% on a six (6) minute block average basis, except for two (2) six (6) minute block averages in a 3-hour period.

F. Stock Piles and Roadways

BPT for all potential sources of fugitive PM emissions, including material stockpiles and roadways, shall be controlled by wetting with water, with calcium chloride, or other methods as approved by the Bureau of Air Quality to prevent visible emissions in excess of 10% opacity on a three (3) minute block average basis.

G. Annual Emission Restrictions

Facility emissions are based on the maximum potential emissions generated from the total facility fuel use cap of 150,000 gallons per year #2 fuel oil or diesel fuel (0.5% sulfur by weight maximum) fired in the diesel units and in the asphalt plant

Total Allowable Annual Emissions for the Facility
(used to calculate the annual license fee)

<u>Pollutant</u>	<u>Tons/yr</u>
PM	3.7
PM ₁₀	3.7
SO ₂	5.3
NO _x	45.3
CO	9.8
VOC	3.6

III. AMBIENT AIR QUALITY ANALYSIS

According to the Maine Regulations Chapter 115, the level of air quality analyses required for a renewal source shall be determined on a case-by-case basis. Based on the information available in the file, and the similarity to existing sources, Maine Ambient Air Quality Standards (MAAQS) will not be violated by this source.

ORDER

Based on the above Findings and subject to conditions listed below the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-123-71-G-R, subject to the following conditions:

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (Title 38 MRSA §347-C).
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115.
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both.
- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request.
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 MRSA §353.

- (6) The license does not convey any property rights of any sort, or any exclusive privilege.
- (7) The licensee shall maintain and operate all emission units and air pollution control systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions.
- (8) The licensee shall maintain sufficient records, to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request.
- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for the renewal of a license or amendment shall not stay any condition of the license.
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license.
- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
 - (i) perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
 - a. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
 - b. pursuant to any other requirement of this license to perform stack testing.
 - (ii) install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and

- (iii) submit a written report to the Department within thirty (30) days from date of test completion.
- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:
- (i) within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
 - (ii) the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
 - (iii) the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.
- (13) Notwithstanding any other provision in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement.
- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emissions and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation.
- (15) Upon written request of the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such manner as the Department shall

prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status.

(16) **Asphalt Plant**

- a. Emissions from the hot mix asphalt plant shall vent to a baghouse, and all components of the asphalt plant shall be maintained so as to prevent PM leaks.
- b. The performance of the baghouse shall be constantly monitored by either one of the following at all times the rotary dryer is operating:
 1. PM detector - when the detector signals excessive PM concentrations in the exhaust stream, MPC shall take corrective action within 24 hours, or immediately if opacity exceeds 20%.
 2. Personnel with a current EPA Method 9 visible emissions certification - when the opacity exceeds 20%, the asphalt batch plant is operating with insufficient control and corrective action shall be taken immediately.
- c. To document maintenance of the baghouse, the licensee shall keep a maintenance log recording the date and location of all bag failures as well as all routine maintenance. The maintenance log shall be located at the facility whenever the facility is in operation.
- d. Opacity from the asphalt batch plant baghouse is limited to no greater than 20% on a 6 minute block average basis, except for no more than 2, six minute block averages in a 3 hour period.
- e. Fugitive PM emissions from the asphalt operation shall be controlled so as to prevent visible emissions in excess of 10% opacity on a 6 minute block average basis.
- f. Fuel use records and receipts for the asphalt kiln shall be maintained for at least six years and made available to the Department upon request. A log shall also be maintained recording the quantity and analyzed test results of all specification waste oil fired in the dryer.
- g. The asphalt kiln shall be limited to a maximum of 16.4 MMBtu/hr heat input. #2 fuel oil and diesel sulfur content shall not exceed 0.5%. Emissions from the baghouse shall not exceed the following:

<u>Pollutant</u>	<u>grs/dscf</u>	<u>lb/hr</u>
PM	0.03	5.71
PM ₁₀	-	5.71
SO ₂	-	8.26
NO _x	-	17.00
CO	-	6.90
VOC	-	4.6

(17) **Concrete Batch Plant**

- a. Particulate emissions from the cement silo and weigh hopper operations shall be vented through each of the respective 3 baghouses and all components of the batch plant shall be maintained so as to prevent PM leaks.
- b. To document maintenance of the three cement batching operation baghouses, the licensee shall keep a maintenance log recording the date and location of all bag failures as well as all routine maintenance. The maintenance log shall be located at the facility whenever the facility is in operation.
- c. Opacity from the three cement baghouses is limited to no greater than 5% on a six (6) minute block average basis.
- d. Fugitive PM emissions from the cement batching operation baghouses shall be controlled so as to prevent visible emissions in excess of 20% opacity on a six (6) minute block average basis.

(18) **Rock Crushers**

- a. MPC shall operate and maintain spray nozzles for particulate control on all rock crushers. Visible emissions from the crushers shall be limited to no greater than 10% opacity on a six minute block average.
- b. MPC shall maintain a log detailing the maintenance on the water spray nozzles. The maintenance log shall be located at the facility whenever the facility is in operation.
- c. MPC shall maintain a log detailing and quantifying the hours of operation on a daily basis for all rock crushers. The operation log shall be located at the facility whenever the facility is in operation.

(19) **Diesel Units**

- a. Fuel use records and receipts for Diesel Generator #1, Diesel Drive #2, Diesel Generator #3 and Diesel Generator #4 shall be maintained for at least six years and available to the Department upon request.
- b. MPC shall not exceed the facility wide total fuel use of 150,000 gal/year of #2 fuel oil or diesel fuel (12 month rolling total), with a sulfur content not to exceed 0.5% by weight.
- c. Emissions from Diesel Generator #1, Diesel Drive #2, Diesel Generator #3 and Diesel Generator #4 shall be limited to the following (based upon AP-42 dated 10/96 for diesels less than 600 hp.):

<u>Pollutant</u>	Diesel Generator #1 <u>lb/hr</u>	Diesel Drive #2 <u>lb/hr</u>	Diesel Generator #3 <u>lb/hr</u>	Diesel Generator #4 <u>lb/hr</u>
PM	0.16	0.31	0.78	0.43
PM ₁₀	0.16	0.31	0.78	0.43
SO ₂	0.25	0.51	1.26	0.69
NO _x	2.21	4.41	11.03	6.04
CO	0.48	0.95	2.38	1.30
VOC	0.18	0.35	0.88	0.48

- d. Visible emissions from Diesel Generator #1, Diesel Drive #2, Diesel Generator #3 and Diesel Generator #4 shall not exceed 30% on a six (6) minute block average basis, except for two (2) six (6) minute block averages in a 3-hour period.
- (20) Potential sources of fugitive PM emissions, including material stockpiles and unpaved roadways, shall be controlled by wetting with water, with calcium chloride, or other methods as approved by the Bureau of Air Quality to prevent visible emissions in excess of 10% opacity on a three (3) minute block average basis.
- (21) **Equipment Relocation**
- a. MPC shall notify the Bureau of Air Quality, by a written notification at least 10 days in advance, prior to relocation of any equipment carried on this license. The notification shall be sent to:

Attn: Relocation Notice
Maine DEP
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017

The notification shall include the address of the equipment's new location and the license number pertaining to the relocated equipment.

- b. Written notification shall also be made to the municipality where the equipment will be relocated, except in the case of an unorganized territory where notification will be made to the respective county commissioners.

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- (22) MPC shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (Title 38 MRSA §605-C).

(23) **Annual Emission Statement**

In accordance with MEDEP Chapter 137, the licensee shall annually report to the Department the information necessary to accurately update the State's emission inventory by means of:

- 1) A computer program and accompanying instructions supplied by the Department;
or
- 2) A written emission statement containing the information required in MEDEP Chapter 137.

Reports and questions should be directed to:

Attn: Criteria Emission Inventory Coordinator
Maine DEP

Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017

Phone: (207) 287-2437

The emission statement must be submitted by September 1.

- (24) MPC shall keep a copy of this Order on site, and have the operator(s) be familiar with the terms of this Order.

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(25) The term of this order shall be for five (5) years from the signature date below.

DONE AND DATED IN AUGUSTA, MAINE THIS DAY OF 2001.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
MARTHA G. KIRKPATRICK, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: February 2, 2001

Date of application acceptance: February 20, 2001

Date filed with Board of Environmental Protection: _____

This order prepared by Mark E. Roberts, Bureau of Air Quality